



Ø **221x71 mm**

**San Ace 221W 9W2T** type   

**General Specifications**

- Material ..... Motor case: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life ..... See the table below. (L10 life: 90% survival rate for continuous operation in indoor free air at 60°C, rated voltage)
- Motor protection function ..... Locked rotor burnout protection, Reverse polarity protection  
For details, please refer to p. 547.
- Dielectric strength ..... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and motor case)
- Insulation resistance ..... 10 MΩ or more with a 500 VDC megger (between lead wire conductors and motor case)
- Sound pressure level (SPL) ..... At 1 m away from the air inlet
- Storage temperature ..... -30 to +70°C (Non-condensing)
- Lead wire ..... ⊕Red ⊖Black (Sensor) Yellow (Control) Brown
- Mass ..... 1250 g
- Ingress protection ..... IP56

**Specifications** When the optional inlet nozzle (109-1135H) is mounted.

The models listed below **have pulse sensors with PWM control function.**

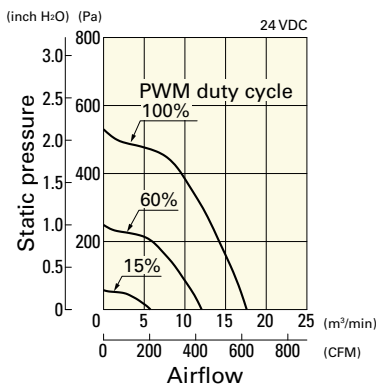
| Model no.            | Rated voltage [V] | Operating voltage range [V] | PWM duty cycle* [%] | Rated current [A] | Rated input [W] | Rated speed [min <sup>-1</sup> ] | Max. airflow [m <sup>3</sup> /min] [CFM] | Max. static pressure [Pa] [inchH <sub>2</sub> O] | SPL [dB (A)] | Operating temperature [°C] | Expected life [h]          |
|----------------------|-------------------|-----------------------------|---------------------|-------------------|-----------------|----------------------------------|--|--|--------------|----------------------------|----------------------------|
| <b>9W2TP24P0H001</b> | 24                | 16 to 36                    | 100                 | 3.35              | 80.4            | 3050                             | 17.6 621                                 | 530 2.13   | 71.5         | -25 to +70                 | 40000/60°C<br>(70000/40°C) |
|                      |                   |                             | 15                  | 0.4               | 9.6             | 1000                             | 5.75 203                                 | 57.0 0.23  | 53.5         |                            |                            |
| <b>9W2TP48P0S001</b> | 48                | 36 to 72                    | 100                 | 2.3               | 110.4           | 3400                             | 19.6 692                                 | 659 2.65   | 73.5         |                            |                            |
|                      |                   |                             | 15                  | 0.2               | 9.6             | 1000                             | 5.75 203                                 | 57.0 0.23  | 53.5         |                            |                            |

\* PWM frequency: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.  
Max input of 9W2TP24P0H001: 150 W, 9W2TP48P0S001: 210 W at rated voltage.

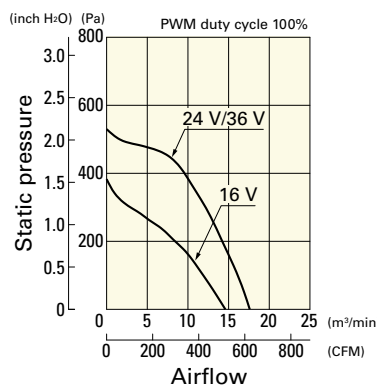
**Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example**

**9W2TP24P0H001** With pulse sensor with PWM control function

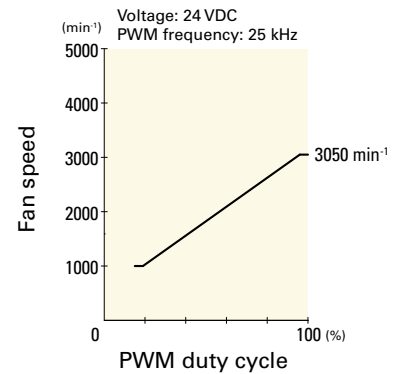
PWM duty cycle



Operating voltage range

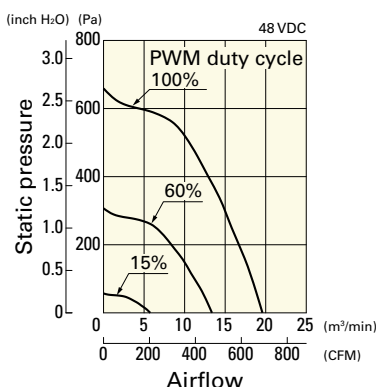


PWM duty - Speed characteristics example

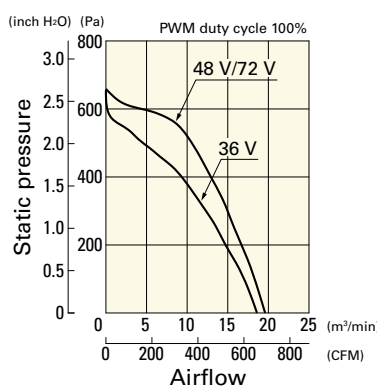


**9W2TP48P0S001** With pulse sensor with PWM control function

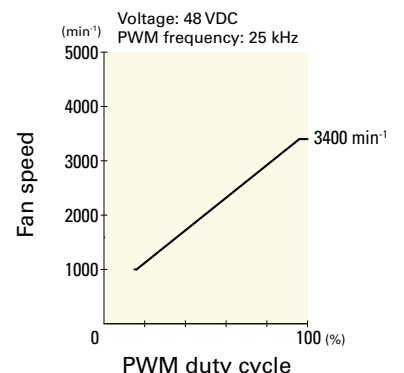
PWM duty cycle



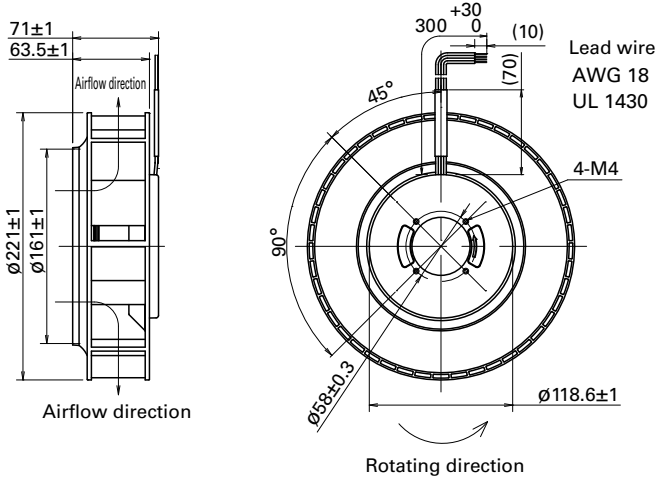
Operating voltage range



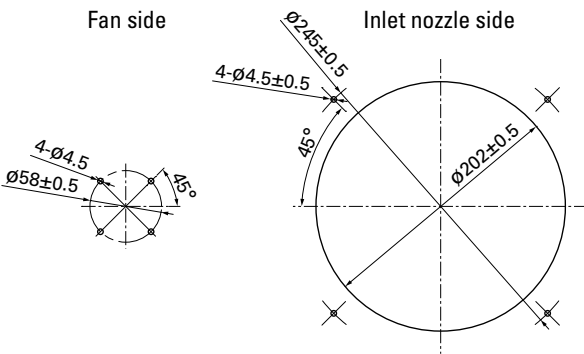
PWM duty - Speed characteristics example



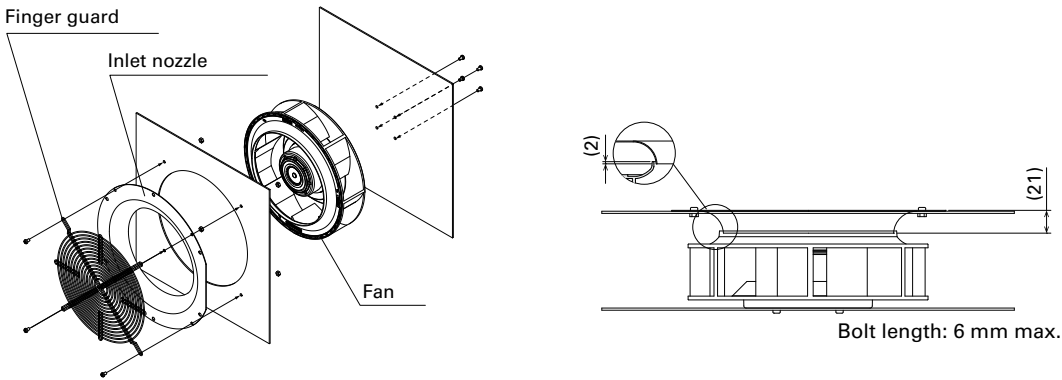
**Dimensions (unit: mm)**



**Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)**



**Reference Diagram for Mounting**



**Options**

Finger guards

page: p. 535

Model no.: 109-1138H

Inlet nozzle

page: p. 537

Model no.: 109-1135H